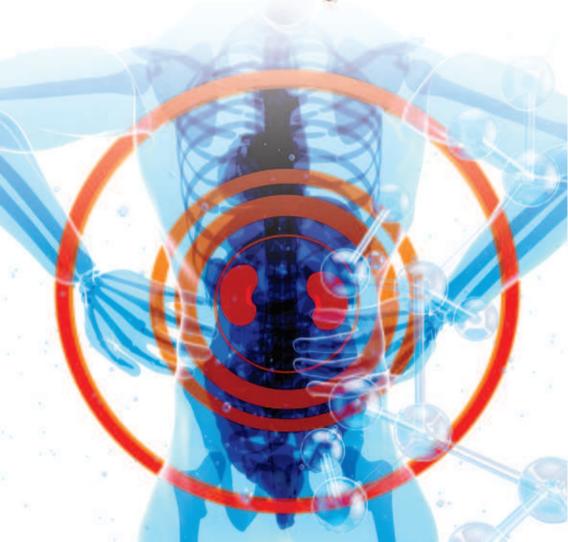


Chronic Kidney Disease

Can be Actually Cured?



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English, so far, has become one of the most important languages that every student should master in order to be able to to compete globally and work internationally. It also goes to nursing students. The need to understand kinds of new nursing knowledge and apply it in the field and communicate in English professionally for them seems as a must in recent years due to the demand of professional nurses to work all around the world. This book is created by compiling from some major sources and being equipped by attractive yet easy-to-understand language. It is hoped to help the future readers understand new issue in a simple way. The benefits of this book are:

- Great explanation about topic with an easy delivery.
- 2. Delivering new information.
- 3. Providing with a detailed information.







CHRONIC KIDNEY DISEASE: CAN BE ACTUALLY CURED?

Ns. Devia Putri Lenggogeni, S.Kep., M.Kep., Sp.Kep.MB. Muhammad Umar Ridhwan, S.Pd., MM.



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PREFACE

English, so far, has become one of the most important languages that every student should master in order to be able to to compete globally and work internationally. It also goes to nursing students. The need to understand kinds of new nursing knowledge and apply it in the field and communicate in English professionally for them seems as a must in recent years due to the demand of professional nurses to work all around the world. This book is created by compiling from some major sources and being equipped by attractive yet easy-to-understand language. It is hoped to help the future readers understand new issue in a simple way. The benefits of this book are:

- 1. Great explanation about topic with an easy delivery.
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- 3. Providing with a detailed information.

This book consists of 2 unit which are explained in detail in the discussion of each chapter, including:

Unit 1 Kidneys

Unit 2 Chronic Kidney Disease

It is hoped that readers will not only be able to understand the topic but also could use the language as needed while having to re-explain or re-inform to others. Then, both theory and practice as it is aimed will be obtained.

Our gratitude to all people we could not mention individually.

Writers, **Devia and Ridhwan**

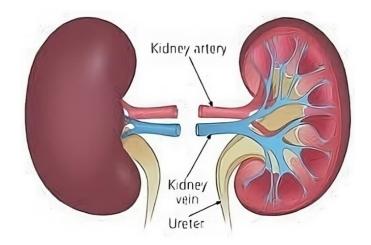
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UNIT

1

KIDNEYS



Source:

https://www.google.com/search?sca_esv=70874ad13 6a7fe8a&sxsrf=ADLYWIJtoIsdycoNEtVCn-cpmX1

A. Overview

The kidneys are a pair of bean-shaped organs located below the rib cage, one on each side of the spine. The kidneys help remove waste products from the body, maintain balanced electrolyte levels, and regulate blood pressure.

The kidneys are some of the most important organs in the body. The ancient Egyptians left only the brain and kidneys in position before embalming a body, inferring that they held a higher value than other organs.

The kidneys are two bean-shaped organs that filter your blood. Your kidneys are part of your urinary system. Your kidneys filter about 200 quarts of fluid every day — enough to fill a large bathtub. During this process, your kidneys remove waste, which leaves your body as urine (pee). Most people pee about two quarts daily. Your body re-uses the other 198 quarts of fluid.

Your kidneys also help balance your body's fluids (mostly water) and electrolytes. Electrolytes are essential minerals that include sodium and potassium. Healthy kidneys filter about a half cup of blood every minute, removing wastes and extra water to make urine. The urine flows from the kidneys to the bladder through two thin tubes of muscle called ureters, one on each side of your bladder. Your bladder stores urine. Your kidneys, ureters, and bladder are part of your urinary tract.

UNIT

2

CHRONIC KIDNEY DISEASE



Source:

https://www.google.com/search?sca_esv=70874ad136 a7fe8a&sxsrf=ADLYWIJjhus8HJfDXNmDb5

A. Overview

Chronic kidney disease (CKD), also called chronic kidney failure, involves a gradual loss of kidney function. Your kidneys filter wastes and excess fluids from your blood, which are then removed in your urine. Advanced chronic kidney disease can cause dangerous levels of fluid, electrolytes and wastes to build up in your body.

In the early stages of chronic kidney disease, you might have few signs or symptoms. You might not realize that you have kidney disease until the condition is advanced.

Treatment for chronic kidney disease focuses on slowing the progression of kidney damage, usually by controlling the cause. But, even controlling the cause might not keep kidney damage from progressing. Chronic kidney disease can progress to end-stage kidney failure, which is fatal without artificial filtering (dialysis) or a kidney transplant.

Signs and symptoms of chronic kidney disease develop over time if kidney damage progresses slowly. Loss of kidney function can cause a buildup of fluid or body waste or electrolyte problems. Depending on how severe it is, loss of kidney function can cause:

- 1. Nausea
- 2. Vomiting
- 3. Loss of appetite
- 4. Fatigue and weakness
- 5. Sleep problems
- 6. Urinating more or less
- 7. Decreased mental sharpness
- 8. Muscle cramps
- 9. Swelling of feet and ankles

BIBLIOGRAPHY

- American Kidney Fund, Inc. *Know Your Kidneys* (https://www.kidneyfund.org/all-about-kidneys/preventing-kidney-disease/know-your-kidneys). Accessed 5/17/2022.
- https://my.clevelandclinic.org/health/body/21824-kidney
- https://www.kidney.org/atoz/content/about-chronic-kidney-disease
- https://www.mayoclinic.org/diseases-conditions/chronic-kidney-disease/symptoms-causes/syc-20354521
- https://www.medicalnewstoday.com/articles/326159#causes
- https://www.nhs.uk/conditions/kidney-disease/ treatment/
- https://www.niddk.nih.gov/health-information/kidney-disease/kidneys-how-they-work
- Institute of Quality and Efficiency in Healthcare (IQWiG). How do the kidneys work (https://www.ncbi.nlm. nih.gov/books/NBK279385/)? Accessed 5/17/2022.
- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). *Your Kidneys & How They Work* (https://www.niddk.nih.gov/health-information/kidney-disease/kidneys-how-they-work). Accessed 5/17/2022.
- National Kidney Foundation. *How Your Kidneys Work* (https://www.kidney.org/kidneydisease/howkidney swrk). Accessed 5/17/2022.

- Ogobuiro I, Tuma F. *Physiology, Renal* (https://www.ncbi.nlm.nih.gov/books/NBK538339/). 2022 Jul 25. In: StatPearls [Internet]. Treasure Island, FL: StatPearls Publishing; 2022 Jan-. Accessed 5/17/2022.
- Peechakara BV, Gupta M. *Water Toxicity* (https://www.ncbi.nlm.nih.gov/books/NBK537231/). 2022 Jun 27. In: StatPearls [Internet]. Treasure Island, FL: StatPearls Publishing; 2022 Jan-. Accessed 5/17/2022.
- Soriano RM, Penfold D, Leslie SW. *Anatomy, Abdomen and Pelvis, Kidneys* (https://www.ncbi.nlm.nih.gov/books/NBK482385/). 2022 Jul 25. In: StatPearls [Internet]. Treasure Island, FL: StatPearls Publishing; 2022 Jan-. Accessed 5/17/2022.

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